DOCUMENT RESUME

ED 439 682 IR 019 953

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TITLE Change and Challenges in Technical Services: A Survey of

Medium-Sized Libraries.

PUB DATE 1999-00-00

NOTE 17p.; Support for this study was provided by the Librarians

Association of the University of California, Santa Cruz.

PUB TYPE Reports - Research (143) -- Tests/Questionnaires (160)

EDRS PRICE MF01/PC01 Plus Postage.

DESCRIPTORS Academic Libraries; Change; Higher Education; Library

Personnel; Library Planning; Library Services; *Library Technical Processes; Public Libraries; Questionnaires; State

Libraries

ABSTRACT

To address an abiding concern of technical services managers regarding the efficient use of staffing resources, a questionnaire was distributed to 200 heads of technical services in medium-sized libraries to ask about their operations, with 82 usable questionnaires returned from 40 public, 38 academic, and 4 state libraries. Respondents were asked for specific data regarding functions included in technical services now and 5 years ago; decreases and increases in staffing; types of changes made in the past 5 years to increase efficiency; and plans for changes in the future. They were also given the opportunity to describe situations not covered by the answer choices presented in the questionnaire. Survey results suggest that funding reductions in technical services are the cause of staffing decreases and may often serve as the primary catalyst for efforts to increase efficiency. On the other hand, technical services staffing increases generally come with the advent of new facilities, new automated systems, and an increase in book budgets. There appears to be no conspicuous trend in organizational change beyond the merging of cataloging and acquisition functions. Two major technical service projects in the past 5 years have brought heightened focus on outsourcing as a solution to budget and efficiency problems. The questionnaire is appended. (AEF)

Change and Challenges in Technical Services:

A Survey of Medium-Sized Libraries

By Larry Millsap and Terry Ellen Ferl

Larry Millsap is Head of Technical Services, University of California Library, Santa Cruz, CA. Terry

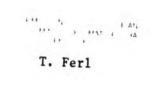
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MO

Support for this study was provided by the Librarians Association of the University of California, Santa Cruz.

ABSTRACT

An abiding concern of technical services managers is the efficient use of staffing resources. The authors, who manage their respective operations, surveyed their peers in medium-sized libraries to see how others have been addressing this concern. The survey instrument included questions about staffing and organizational change, workflow change, and outsourcing. This paper presents an analysis of the results of the survey.



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Change & Challenges in Tech Services, p. 1 of 15

INTRODUCTION

In the past three decades, automation has profoundly transformed the management of technical services in libraries. The development of the MARC (MAchine Readable Cataloging) format by the Library of Congress in the late 1960s and the advent of OCLC at about the same time are the most notable contributions to this transformation. [1] The continuous evolution of computerization in technical services has enabled staff to access and share data in electronic format from a variety of sources and for varied purposes. As recently as a decade ago, however, Sheila Intner suggested that libraries were still finding their way organizationally while library computing systems advanced and matured. [2]

To find out where we have come in the past five years, the authors posed several questions for investigation:

- How has the way we work in technical services changed in recent years?
- Which functions do we now include in departments traditionally called Technical Services?
- Are fewer staff accomplishing more?
- Are more tasks being performed beyond the library setting?
- What problems are encountered by technical services managers as they confront new production demands and attempt to implement solutions?

METHODOLOGY AND QUESTIONNAIRE

A questionnaire was designed to survey the heads of technical services in medium-sized libraries about their operations. Respondents were asked for specific data regarding functions included in technical services now and five years ago; decreases and increases in staffing; types of changes made in the past five

years to increase efficiency; and plans for changes in the future. They were also given the opportunity to describe situations not covered by the answer choices presented in the questionnaire. The questionnaire was mailed to 200 libraries in the United States, selected at random from a population of 315 libraries that met the definition of a medium-sized library for the purposes of this study. [3] The Appendix to this article contains the questionnaire and the cover letter that accompanied it.

RESPONSES

There were 84 questionnaires returned, 82 of which had usable data. This represents a 41.5 percent return rate for the surveyed population and a 26 percent sample of the entire population of medium-sized libraries. The questionnaires were coded to provide the authors with some demographic information and a way to contact respondents later if that proved necessary. Thirty-six states from all regions of the country were represented among the respondents. Forty of the responses were from public libraries, 38 from academic libraries, and four from state libraries

ORGANIZATION OF TECHNICAL SERVICES

The two respondents who did not include data and four of the remaining 82 respondents reported that they did not have a department called technical services. When the respondents were asked which functions were included as part of technical services, the function least likely to be included was collection development (included in 31 departments). The next least likely were accounting (included in 39) and preservation (included in 47). Serials control was not included in 20 of the 82 departments. The functions most likely to be included were cataloging (in all but one), labeling (in all but 5), and acquisitions (in all but 6). Academic libraries were much more likely to include collection development, serials control, and accounting functions than were public libraries. [4]

Less-Frequently Included Functions

	Type of Library					Group Total		
	Academic		Public		State			
	Count	%	Count	%	Count	%	Count	%
Collection Development								
Included	18	47.4%	11	27.5%	2	50%	31	37.8%
Not	20	52 6%	29	72.5%	2	50%	51	62.2%
Accounting								
Included	24	63.2%	14	35%	1	25%	39	47.6%
Not	14	36.8%	26	65%	3	75%	43	52.4%
Scrials Control								
Included	36	94.7%	22	55%	4	100%	62	75.6%
Not	2	5.3%	18	45%	0	()%	20	24.4%

Table 1

CHANGES IN STAFFING IN THE PAST FIVE YEARS

Five libraries initially provided information that we could not interpret, but four of them responded to requests for clarification. The remaining library reported conflicting figures about staffing increases and decreases and so was excluded from this section. Forty-nine libraries (60.5%) in our study reported technical services staffing decreases; twenty (24.7%) reported increases; and twelve (14.8%) reported stable staffing over the past five years. In those libraries reporting increases, a total of 50.7 FTE including 16 librarian FTE was added for increases of 26.7% in total staff and 39.4% in librarians. For those libraries reporting decreases in staff, a total of 154 FTE including 46.7 librarian FTE was lost for decreases of 17.5% in total staff and 20.4% in librarians. Only three academic libraries reported increases in staff while 27 reported decreases. Sixteen public libraries reported increases and 20 reported decreases. One state library reported increases and two reported decreases. Both the greatest increases and decreases were reported by public libraries. (See Table 2.)

Staffing Increases and Decreases

	Type of Library			
	Academic	Public	State	Total
100% or more Increase		1		1
81-90% Increase		1		1
41-50% Increase		2		2
31-40% Increase		1		1
21-30% Increase		3		3
11-20% Increase	1	6		7
1-10% Increase	1	1		3
Unspecified Increase	1	1	1	2
No Change	7	4	1	12
Unspecified Decrease	1	2		3
1-5% Decrease	3	1		4
6-10% Decrease	9	4		13
11-15% Decrease	3	1		4
16-20% Decrease	5	3	2	10
21-30% Decrease	5	3		8
31-40% Decrease		2		2
41-50% Decrease	1	2		3
51-60% Decrease		1		1
61-70% Decrease		1		1
Unclear Data	1			1
Total	38	40	4	82

Table 2

Among the 20 libraries reporting staffing increases. 13 reported increased rates of acquisitions as at least one cause for it. Five of those and one other reported that new functions had been added to the technical services department. One of the libraries with increased acquisitions and one other reported the installation of a new automated system as a cause for additional staff. One reported that staff was being added throughout their system, and two gave no reason for the increase. The library with the biggest increase had an increased rate of acquisitions, a new automated system, and "additional facilities."

The majority of libraries reporting decreases in staffing attributed the decrease to increased efficiency or budget reductions in combination with increased efficiency. Table 3 gives the reasons for decrease in staffing at all 49 libraries reporting a decrease.

Reasons for Staffing Decreases

	Number	Percent
Lower acquisitions rate	2	4.08
Budget reductions	8	16.32
Increased efficiency	12	24.57
Budget reductions/Increased efficiency	14	28.57
Lower acquisitions rate/Budget reductions	4	8 16
Lower acquisitions rate/Increased efficiency	2	4.08
Lower acquisitions rate/Budget reductions/Increased efficiency	2	4.08
Staff transferred to public services or held open	. 4	8.16
No reason given	1	2.04
Totals	49	100 0

Table 3

CHANGES TO INCREASE EFFICIENCY IN THE PAST FIVE YEARS

Efficiency Measures

Respondents in 93% of our cases said they had changed workflow or combined departments. Fifty-two libraries (63.4%) said they had made some changes and planned more. Only 6 libraries had not made changes and did not plan to do so. A wide range of changes was reported. Combining departments was the one change that was reported by a majority of those who supplied information. Thirty-five libraries had combined some functions. Those most likely to be combined were the acquisitions and copy cataloging functions. Eleven libraries reported this combination and three others reported they had improved the workflow or coordination between these two functions. No other pattern of combining functions was chosen by more than two libraries

Several libraries gained efficiency by dropping certain tasks and streamlining procedures. One decreased the amount of bibliographic searching that was done; another ceased creating order records for all titles.

Another eliminated duplicate record keeping between acquisitions and cataloging. Three eliminated their shelf lists; one eliminated Cutters and copy numbers. Two discouraged editing of cataloging copy unless access would be affected. One decreased the review of catalogers' work. Several reported developing

priority systems so that high-demand material was processed quickly. One reported trying to keep material moving instead of stopping whenever an exception arose

Various methods of using technology to increase efficiency were reported. Libraries had automated additional functions, replaced their OPACs, obtained faster computers or multi-task workstations, or installed the Cataloger's Desktop. Newly automated functions ranged from new serials and acquisitions systems to computer-generated labels, online ordering, and software to assist with authority control. Several libraries reported increased efficiency by moving from OCLC dedicated-line access to Internet access, and making it available at each cataloger's workstation. Two reported using the OCLC MicroEnhancer program and one had installed direct access to the LC databases.

Various changes in the use of staff were reported. Cross training was reported by several libraries; SQC, which we take to mean quality circles, by one. More use of students or paraprofessionals was reported by four libraries. Assigning additional functions to existing positions and assigning multiple functions to one person were also reported, although the latter was judged to have been counterproductive. Some libraries reported being able to transfer some tasks to other areas of the library, e.g., selection work to branch managers. Two reported physically rearranging the work area, and one reported what must have been a popular change fewer meetings.

Outsourcing

Twelve libraries (14 6%) have outsourced at least part of their authority work, two (2 4%) have outsourced some of it and plan to do more, and five (6 1%) plan to outsource this work in the future. The remaining 63 libraries (76.8%) have no plans to outsource authority work. Twelve libraries (14.6%) have outsourced at least part of their cataloging work, ten (12.2%) have outsourced some of it and plan to do more, and nine (11%) plan to outsource cataloging in the future. The remaining 51 libraries (62.2%) have no plans to outsource cataloging. Ten libraries (12.2%) have outsourced at least part of their labeling, four (4.9%)

have outsourced some of it and plan to do more, and eleven (13.4%) plan to outsource the work in the future. The remaining fifty-seven libraries (69.5%) have no plans to outsource labeling.

Of the fourteen libraries outsourcing authority work, half of them outsource all of it. Six of the remaining seven outsource 60-90%. One library did not report the percentage that was outsourced. There was a much wider range of the percentage of cataloging work outsourced: three libraries outsource 1% and one library outsources 99%. While five reported outsourcing 50% or more; most outsourced 25% or less. Three libraries did not report the percentage of cataloging outsourced, and one reported that they had tried outsourcing and stopped doing it.

Of the fourteen libraries that outsourced labeling, half outsourced 10-30% of the work and the other half outsourced 40-90%. Four libraries reported outsourcing preservation work. Three of those outsource 90-100% of it, one, only 10%

The Greatest Challenge

Eight libraries did not respond to the open-ended question about the greatest challenge, but of the remaining seventy-three who did, many identified multiple challenges. The relationship between the amount of work to be done and the staffing level available was the most frequently identified challenge and was included in the responses of 28 libraries. Many have seen their workloads increase and their staffing decrease. Some libraries are no longer able to keep up with current work, but more are unable to complete retrospective projects, catalog backlogs, do authority work, or tend to books that need restoration. One library that was unable to keep up with the projects that public service staff wanted accomplished was being assisted in copy cataloging by public service staff. Another reported that having an automated system that allowed patrons to request in-process books was resulting in catalogers spending most of their time on requested books while a backlog of other materials developed. Another reported that there was no longer time to give individualized treatment to special materials.

Keeping up with changing technology and adjusting to a fast rate of change was a challenge identified by fourteen respondents. A need for training to help staff keep up with technology and increase efficiency was noted in many different ways. Technical services managers see it as necessary to cross train staff and increase the productivity and efficiency of staff already assigned to specific functions. They want to increase skills among all staff and produce high-quality cataloging in the least amount of time. One manager's challenge was to maintain the current "five-day turnaround time" without developing backlogs. Others reported less positive challenges of implementing change with a staff that is resistant to change. One library identified its biggest challenge as "intransigent staff."

For some technical services managers, the biggest challenge was to accomplish specific processing tasks, e.g., catalog electronic materials, keep acquisitions data current and in agreement with official bookkeepers, maintain Web pages, catalog meta-data, or develop procedures for kits and multimedia materials. Others had more general goals of standardizing procedures in order to outsource more, integrating electronic resources into their workflow, or negotiating with vendors. For four managers, the entire field of outsourcing was the challenge. For one, it was obtaining CONSER and NACO status.

For several respondents, funding was the biggest challenge. Two cited insufficient funds for materials, one noted the serials budget was insufficient, and four said the same about the budget for electronic resources. For one respondent the biggest challenge was coping with a large increase in the materials budget. One manager cited automation generally as a challenge. Three mentioned decaying systems or technical obsolescence, and three others mentioned installing new systems. One needed an acquisitions system what would operate on a WAN. Another needed to make the equipment work effectively.

For three respondents, moving into a new facility was the biggest challenge. For three others, lack of space was the problem. One had no space for new staff that had been hired, another was unable to hire

staff because there was no place to put them. In two libraries, salaries were reported as being too low to attract competent people.

The remaining greatest challenges were problems of administration. Among these were how to provide leadership for all the staff, how to divide the labor among staffing resources insufficient to complete all the work, how to redirect staff efforts to higher-level work after outsourcing has taken away the base level tasks, and how to get staff to see the big picture. One manager cited the need to implement a new organizational structure while minimizing negative impact on services. Some managers had to deal with cataloging staff demoralized by being "cannibalized" for other library functions, or with hostility among staff when there is stress caused by unfilled vacancies or high absenteeism. For one respondent, there was a lack of understanding between technical services and public services. Several cited the challenge of explaining to the library administration how technical services work is critical to the library's service goals and that everything can't be outsourced. One manager mentioned simply "front office neglect."

CONCLUSIONS

The survey results suggest that funding reductions in technical services are the cause of staffing decreases and may often serve as the primary catalyst for efforts to increase efficiency. On the other hand, technical services staffing increases generally come with the advent of new facilities, new automated systems and an increase in book budgets. In any case, the challenges chronicled by our respondents suggest that technical services managers are experiencing increased pressure to deliver quality work at lower costs.

There appears to be no conspicuous trend in organizational change beyond the merging of cataloging and acquisition functions—one that is likely prompted by the integration of automated systems in these closely related areas. There does seem to be widespread expectation that reorganization can be used to increase efficiency.

In a recent article, Barry Baker encourages technical services managers to consider "reengineering" as a solution to their problems. Reengineering is essentially the rethinking of one's processes in an attempt to "find breakthrough ways of improving them." As the result of reengineering, a manager may sometimes turn to outsourcing as the solution. "Libraries, never exactly on the cutting edge of innovation, are being forced to consider ... new outsourcing methods." [5]

Two major technical services projects in the past five years have brought heightened focus on outsourcing as a solution to budget and efficiency problems. These are the widely reported outsourcing projects of Wright State University in 1993 and of the Hawaii State Public Library System in 1996. Mr. Baker describes these projects briefly in the article cited above. He also included a report of yet another such project in the Technical Services Report section of *Technical Services Quarterly* 15, no. 3 (1998), p. 88-89. The Library of Florida Gulf Coast University, Florida's newest state university, has outsourced its entire technical services and related operations from day one.

While some blanch at the wholesale outsourcing represented by these two projects, outsourcing (as Baker describes it) actually began many decades ago and is commonplace to some degree in most libraries.

Indeed, Richard W. Boss, a widely respected library consultant, and Neal-Schuman, a longtime publisher in the library world, have provided guidelines to help technical services managers assess outsourcing as an option for nearly every technical services function. [6]

The authors suggest that future investigators of technical services operations may want to focus on specific reengineered and/or outsourced functions. The shared results could help managers move more confidently into new territory and resolve some of their greatest challenges.

NOTES

- Larry Millsap, "A History of the Online Catalog in North America," Technical Services
 Management, 1965-1990: A Quarter Century of Change and a Look to the Future:

 Festschrift for Kathryn Luther Henderson (New York: Haworth Press, 1996), p. 82-82.
- 2. Sheila S. Intner and Josephine Riss Fang, Technical Services in the Medium-Sized Library: an Investigation of Current Practices (Hamden, Conn.: Library Professional Publications, 1991), p. 5-9. Ms. Intner's study includes the results of a survey of libraries, a detailed and comprehensive review of the broad range of work accomplished in technical services operations, and an analysis of emerging trends.
- 3. Neither the American Library Association (ALA) nor any other entity provides a standard definition of a medium-sized library. For the purposes of this study, the sample of public, academic and special libraries was based on libraries reporting holdings to ALA of 500,000 to 2,000,000 volumes in 1998. Library listings and mailing labels based on this sample were produced for the authors by Cahner's Direct Mail Service. Other vendors with similar services may be found on the ALA web site at http://www.ala.org/library/fact3.html.
- 4. Ms. Intner, in a summary of the various definitions of technical services, found it useful "to fall back on the fundamental principle that the performance of a librarian's job responsibilities without any interaction with the public is the distinguishing feature of technical services" (ibid., p. xi-xiii). She therefore included circulation control in her analysis, as did Maurice Tauber in his *Technical Services in Libraries* (New York: Columbia University Press, 1954). We have not included circulation control in our study.

Change & Challenges in Tech Services, p. 12 of 15

- Baker, Barry B., "Resource Sharing: Outsourcing and Technical Services," Technical Services Quarterly 16, no. 2 (1998), p. 36, 44.
- Richard W. Boss, "Guide to Outsourcing in Libraries," Library Technology Reports 34, no. 5
 (Sept /Oct. 1998); and, Arnold Hirshon and Barbara Winters, Outsourcing Library
 Technical Services: A How to do it Manual for Librarians (New York, Neal-Schuman
 Publisher, 1996).

APPENDIX: QUESTIONNAI				
What type of library do you Academic	work in			
Public				
Special (please specify type	1			
special (please specify type	,			
2. What functions are included Check all that apply. Please in also 5 years ago:				nction now and
FUNCTION	Total FTE	Total FTE	Librarian FTE	Librarian FTE
	today	5 years ago	today	5 years ago
Collection development	, out	o , caro ago	today	s yours ago
_Acquisitions				
Serial control				
Accounting				
_ Copy Cataloging				
Original Cataloging		-		
Catalog Maintenance				
_Labeling		-	Anna Anna Anna Anna Anna Anna Anna Anna	
Preservation	-	-	-	
TOTAL TS STAFF			-	
3. If staffing has decreased ov	er the last 5 years.	please indicate rea	asons for change. C	heck all that apply:
_N/A; staffing has increased				
Lower rate of acquisitions				
_Reductions in staffing budge				
Increase in efficiency				
Other. Please describe:				
_Other. Flease describe.				
4. If staffing has increased, pl	ease indicate reaso	ons for change. Ch	neck all that apply:	
·				
_N/A; staffing has decreased _Increased rate of acquisition				
_Other. Please describe:				
5. Has your technical services Yes. No. If yes, pleas				past 5 years?
Changed work flow/Combin				
changes note non-comon	iou ucpurtinonta. 1		3 7	
		(Continued or	n dack)	

_Outsourced work. Please check all that apply. If you indicate that you do outsource some work, please
indicate the percentage of that type of work that your library outsources.
Selection (Percentage)
Catalog authority work (Percentage)
Cataloging (Percentage)
PromptCat (Percentage)
Other sources of cataloging (Percentage)
_Labeling (Shelf-ready books) (Percentage)
_Accounting (Percentage)
Serials control (Percentage)
Preservation (Percentage)
_Other. Please describe.
No. 1 and 1
Made other changes to increase efficiency. Please describe.
6. Does your technical services department expect to make changes to increase efficiency in the next 12-
24 months? Yes. No. If yes, please indicate which of the following you expect do:
24 months: res to. If yes, please indicate which of the following you expect do.
Change work flow/Combine departments. Please describe the changes:
Outsource work. Please check all that apply.
Selection
Catalog authority work
Cataloging
PromptCat
_Other sources of cataloging
_Labeling (Shelf-ready books)
Accounting
Serials control
Prescruation
Other, Please describe.
Otto: 1 telle desertor.
Make other changes to increase efficiency. Please describe.

7. What is the biggest challenge facing technical services in your library?

Change & Challenges in Tech Services, p. 15 of 15

Cover letter

September 1, 1998

Dear Colleague:

We are conducting a survey of technical services operations in medium-sized public, academic, and special libraries. We hope to determine from the results the current trends in organizational change for technical services, and to publish those results for the review of our colleagues.

We would be very grateful is you would contribute to this study by completing and returning the enclosed questionnaire i. the stamped envelope we have provided. The survey takes approximately 10-15 minutes to complete.

While the survey forms bear codes which will reveal to us the source institution, no identification of specific institutions will appear in any publication or be revealed beyond the survey team.

Thank you in advance for your assistance with this study.

Sincerely yours,

Larry Millsap Head of Technical Services University of California, Santa Cruz. Santa Cruz, California Terry Ellen Ferl
Technical Services Librarian
8th Circuit Appeals Court Library
St. Louis, Missouri

Enclosures: 2

END

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